at least one channel extending in a substantially radial direction through each capture shelf to permit fluid communication between adjacent capture shelves in the radial array; and

at least one barrier located on the inner surface of the rotor in the condensing section across the flowpath of the fluid.

28. An evaporatively cooled rotor adapted for rotation about an axis and having a rotor wall defining an internal cavity including a vaporization section disposed radially outwardly with respect to the rotational axis from a condensing section, the rotor further comprising:

a radial array of capture shelves located along the rotor wall in the vaporization section, each capture shelf having a lip disposed at a substantially constant radius from the rotational axis and a well adjacent to the lip for capturing cooling fluid;

wherein the well of at least one capture shelf has a graded slope adjacent to the rotor wall the graded slope being inclined inwardly away from the condensing section.

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